



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant : Fabry et al
Appl. No. : 10/009,453
Filed : 11/05/01
Title : COSMETIC OR PHARMACEUTICAL UTILIZATION OF
NANOSCALIC METAL SOAPS

Grp./A U. : 1617
Examiner : L. Wells

Docket No. : H 4132 PCT/US

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 4, 2003.

June 4, 2003
Date

~~Signature of certifier~~

Marlene Capreri
Typed or printed name of certifier

APPEAL BRIEF TRANSMITTAL

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 222313-1450

Sir:

Appellants' brief, in triplicate, is transmitted herewith in accordance with 37 CFR 1.192.

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Respectfully submitted,

Cognis Corporation
2500 Renaissance Blvd., St. 200
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(610) 278-4929



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
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Alexandria, VA 22313-1450

BRIEF ON APPEAL UNDER 37 C.F.R. 1.192

Sir:

REAL PARTY IN INTEREST

The real party in interest is Cognis Deutschland GmbH & Co. KG,
Henkelstrasse 67, 40589 Duesseldorf, Germany.

RELATED APPEALS AND INTERFERENCES

None.

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STATUS OF CLAIMS

Claims 9-20 are pending and the subject of this appeal.

STATUS OF AMENDMENTS

No amendments were made after final rejection.

SUMMARY OF THE INVENTION

Briefly stated, the present invention is directed to a composition containing a cosmetically- and/or pharmaceutically active ingredient in combination with a metal soap whose particles have a mean diameter of from about 10 to 300 nm, which impart enhanced stability, opacity and consistency to the composition. See page 1, line 16, to page 4, line 21 of the application.

ISSUES

Whether the claimed invention is obvious under 35 U.S.C. § 103(a) over Le Royer et al. (US 5,939,079).

Whether the claimed invention is obvious under 35 U.S.C. § 103(a) over Le Royer et al. (US 5,939,079) in view of Miles (US 2,456,437).

GROUPING OF THE CLAIMS

The claims stand and fall together.

ARGUMENT

The Le Royer reference fails to render the claimed invention *prima facie* obvious on the grounds that: (1) it fails to teach or suggest all of the claim limitations, and (2) it fails to contain the requisite teaching or suggestion to motivate one of ordinary skill in the art to modify its disclosure in a manner which would read

on the claimed invention.

Initially, Appellant would like to note that it is well settled that in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure [underline emphases added]. See, *Manual of Patent Examining Procedure*, Rev. 3, July 1997, § 2142, pages 2100-108. Appellant respectfully submits that the Le Royer reference fails to render the claimed invention *prima facie* obvious because it fails to teach or suggest the use of metal soaps having a mean diameter of from 10 to 300 nm, which is an element of the claimed invention.

The Examiner had initially based her conclusion of *prima facie* obviousness on the Le Royer's teaching that metal soaps having a particle size of less than 10 μm may be used as a filler in its dispersion. While the Examiner acknowledged that this reference failed to teach the claimed particle size of from about 10 to 100 nm, the Examiner attempted to overcome this lack of teaching by shifting the burden of proof unto Appellant to show why it would not, via mere optimization, be obvious to employ metal soap nanoparticles having the claimed particle size.

The claimed invention requires the use of metal soaps having a particle size of from about **10 to 100 nm**. The Le Royer reference, on the other hand, discloses the use of metal soaps having a particle size of **less than 10,000 nm**. The Examiner has thus concluded that because the particle size range disclosed by the Le Royer reference, i.e., **less than 10,000 nm**, encompasses the instantly claimed particle size range, i.e., **10 to 100 nm**, the use of the claimed smaller particles involves nothing more than mere

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optimization which would be obvious to one of ordinary skill in the art. In essence, therefore, the Examiner is arguing that the difference between the claimed particle size range and that of the Le Royer reference is so trivial that it would be obvious for the routineer to wish to employ it. Assuming the Examiner's argument to be well founded, the same logic would hold true regardless of the number of zeros contained in Le Royer's particle size number, i.e., **100,000 nm** or **1,000,000 nm**, and so on, so long as the words **less than** preceded that number.

Appellant respectfully submits that a particular parameter must first be recognized as a result-effective variable **before** the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. See, *MPEP 2144.05*. Nowhere within the four corners of the Le Royer reference is it taught and/or suggested that the particle size of the metal soap is a result-effective variable. On the contrary, in view of the Le Royer's disclosure of **numerous** filler candidates, including both organic and inorganic varieties, along with their attendant variable particle sizes, it is clear that the particle size of the filler component employed by Le Royer is **NOT** considered by this reference to be a result-effective variable. As a result, the Examiner's argument concerning "optimization" of this variable being obvious is clearly misplaced.

Moreover, with respect to the Examiner's attempt to place the burden of proof on Appellant to show that the claimed particle size is unobvious, Appellant would like to note that it is extremely well settled in the law that the mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability which forces an Applicant to prove conclusively that the Patent Office is wrong. See, *In re Soli*, 137 USPQ 797 (CCPA 1963). The ultimate legal conclusion of obviousness must be based on facts or records, not on the Examiner's unsupported allegation that a particular modification is known, or easily discoverable by routine experimentation, and therefore obvious. Subjective opinions are of little weight in determining obviousness. See, *In re Wagner et al*, 152 USPQ 552 (CCPA 1967).

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Finally, Appellant would like to note that the Examiner's conclusion of obviousness is believed to be based on an impermissible "obvious to try" rationale. It is well settled that where the prior art gives either no indication as to which parameters are critical or no direction as to which of many possible choices is likely to be successful, *prima facie* obviousness may not be based on an improper "obvious to try" rationale. See, *In re O'Farrell*, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988). Clearly, such is the case here.

Neither Le Royer nor Miles, alone or in combination, contain the requisite teaching or suggestion to render the claimed invention *prima facie* obvious.

The shortcomings associated with the Le Royer reference are as outlined above. With respect to the Miles reference, it is relied upon merely for its teaching regarding the use of organic material to coat soap particles. Appellant has argued that the problem with Miles' teaching, however, is that it is silent with respect to the potential for using organic materials to coat **inorganic** soap particles such as the claimed **metal** soap particles. The only soap particles referred to by this reference, which are coated with its organic coating material, are sodium soaps of fatty acids. Thus, even if a person of ordinary skill in the art had both the Le Royer and Miles references in front of them, they would not necessarily be motivated to apply the organic material of the Miles reference onto the metal soaps of the Le Royer reference since there is no teaching or suggestion that this can be successfully done. Moreover, there is no teaching or suggestion in either reference that the problem addressed by the Miles reference, i.e., elimination of dust particles, is also a problem experienced by metal soaps. Thus, in Appellant's opinion, the use of the organic materials of the Miles reference on the metal soaps of the Le Royer reference is far from obvious.

In response to Appellant's above-noted argument, the Examiner now contends that because the Miles reference fails to exclude inorganic soap particles but instead refers to soap particles in general, it would thus be *prima facie* obvious to the routineer to want to

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coat inorganic soap particles. Appellant, however, was under the impression that *prima facie* obviousness needed to be premised upon a teaching or suggestion **within** a relied upon reference. The Examiner, however, has chosen to exercise a different standard of proof for determining obviousness. According to the Examiner's rationale, *prima facie* obviousness can be based on the **silence** of a reference, i.e., based on what it **doesn't teach or suggest**. As a result, the Examiner has concluded that because the Miles reference **doesn't** teach or suggest that inorganic soap particles can be coated with its organic materials, it is *prima facie* obvious to the routineer to do so. Appellant respectfully disagrees with the Examiner's rationale and conclusion. Appellant believes that *prima facie* obviousness must be based upon what a prior art reference says, not on what it doesn't say.

It is well settled in the law that the mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability which forces an applicant to prove conclusively that the Patent Office is wrong. See *In re Soli*, 137 USPQ 797 (CCPA 1963). The ultimate legal conclusion of obviousness must be based on facts or records, not on the Examiner's unsupported allegation that a particular modification is known and therefore obvious. Subjective opinions are of little weight in determining obviousness. See *In re Wagner et al*, 152 USPQ 552 (CCPA 1967).

Finally, in view of the shortcomings associated with the Le Royer reference, i.e., its lack of teaching, suggestion **or motivation** to employ inorganic nanoparticle fillers possessing the claimed particle size, as outlined above, even if these two references were combined, as is suggested by the Examiner, their combined teachings would nevertheless fail to render the claimed invention *prima facie* obvious.

SUMMARY

Since the Le Royer reference fails to both teach or suggest all of the claim

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limitations, as well as motivate one skilled in the art to modify its teaching in a manner which would read upon the claimed invention, a prima facie case of obviousness should not be established against the present invention based on Le Royer's disclosure.

Since the Le Royer and Miles references fail to teach or suggest all of the claim limitations, as well as motivate one skilled in the art to modify their teaching in a manner which would read upon the claimed invention, a prima facie case of obviousness should not be established against the present invention based on their combined disclosure.

It is requested for the reasons given above, that the Board find for Appellant on all of the issues, and reverse the Examiner's Final Rejections.

Respectfully submitted,


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Enc.: Appendix

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APPENDIX

CLAIMS ON APPEAL

9. A composition comprising:
 - (a) an active ingredient selected from the group consisting of a cosmetically-active ingredient, a pharmaceutically-active ingredient, and mixtures thereof; and
 - (b) metal soap nanoparticles having a mean diameter of from about 10 to 300 nm.
10. The composition of claim 9 wherein the metal soap nanoparticles have a mean diameter of from about 50 to 150 nm.
11. The composition of claim 9 wherein the metal soap nanoparticles are coated with a compound selected from the group consisting of a protective colloid, an emulsifier, and mixtures thereof.
12. The composition of claim 9 wherein the metal soap nanoparticles are present in the composition in an amount of from about 0.1 to 5% by weight, based on the weight of the composition.
13. The composition of claim 9 wherein the metal soap nanoparticles are present in the composition in an amount of from about 0.5 to 3% by weight, based on the weight of the composition.
14. The composition of claim 9 wherein the metal soap nanoparticles are present in the composition in an amount of from about 1 to 2% by weight, based on the weight of the composition.
15. A process for enhancing the stability, opacity and consistency of a cosmetic or pharmaceutical composition comprising adding metal soap nanoparticles having a mean diameter of from about 10 to 300 nm to the composition.
16. The process of claim 15 wherein the metal soap nanoparticles have a mean diameter of from about 50 to 150 nm.

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17. The process of claim 15 wherein the metal soap nanoparticles are coated with a compound selected from the group consisting of a protective colloid, an emulsifier, and mixtures thereof.
18. The process of claim 15 wherein the metal soap nanoparticles are added to the composition in an amount of from about 0.1 to 5% by weight, based on the weight of the composition.
19. The process of claim 15 wherein the metal soap nanoparticles are added to the composition in an amount of from about 0.5 to 3% by weight, based on the weight of the composition.
20. The process of claim 15 wherein the metal soap nanoparticles are added to the composition in an amount of from about 1 to 2% by weight, based on the weight of the composition.